

139449

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(CAS) CAS Registry Number: 1336-36-3

(MAT) Material Name: \$\$\$ POLYCHLORINATED BIPHENYLS \$\$\$

- (USS) Common Uses: COOLANTS IN TRANSFORMERS; FLUORESCENT LIGHT BALLASTS; ELECTRICAL INSULATION; PLASTICIZER; EPOXY PAINTS; CARBONLESS REPRODUCTION; PAPER LUBRICANTS; MUCH OF THE TOTAL PRODUCTION OF PCBS IS STILL IN USE AS DIELECTRIC (INSULATOR), HEAT-TRANSFER, OR HYDRAULIC FLUIDS. (DPIRDU 1,81/SAX) PCBS HAVE BEEN THE MAJOR COMPONENTS OF ASKARELS USED IN THE UNITED STATES SINCE 1932. ASKAREL IS A GENERIC TERM USED FOR A BROAD CLASS OF NONFLAMMABLE SYNTHETIC CHLORINATED HYDROCARBON INSULATING LIQUIDS USED IN ELECTRICAL CAPACITORS, TRANSFORMERS, NUCLEAR REACTORS, AND ACCESSORY EQUIPMENT. (CRSOE* 77-225,77/NIOSH) UPDATED 11/84.
- (CON) Containers: FORMER PCB SHIPMENT CONTAINERS INCLUDE GLASS BOTTLES (5 L), EARTHENWARE (5 L), PLASTIC BOTTLES (5 L), AND METAL CANS AND DRUMS (30 AND 250 L, RESPECTIVELY) (85EZAO 78/IMCO) (49CFR* 101.1) (RARAD5 80/IATA) DOT (DEPARTMENT OF TRANSPORTATION) HAZARDOUS MATERIALS TABLE: SPECIFIC PACKAGING REQUIREMENTS ARE CITED IN 49CFR 173.510 (GENERAL PACKAGING REQUIREMENTS). MAXIMUM NET QUANTITY IN ONE PACKAGE: NO LIMIT ON PASSENGER AIRCRAFT OR RAILCAR; NO LIMIT ON CARGO-ONLY AIRCRAFT. DEPARTMENT OF TRANSPORTATION OPTIONAL HAZARDOUS MATERIALS TABLE (49CFR* 172.102,10-31-83/DOT): UN PACKING GROUP II. ICAO INSTRUCTIONS (ICAO** 83/ICAO) -- PACKING GROUP II; PACKING INSTRUCTIONS FOR PASSENGER AIRCRAFT 907 AND FOR CARGO AIRCRAFT 907. MAXIMUM NET QUANTITY IN ONE PACKAGE: 100 L ON PASSENGER AIRCRAFT, 220 L ON CARGO-ONLY AIRCRAFT. UPDATED 11/84.

(STO) General Storage Procedures: STORE PCBS IN ISOLATED AREAS WHERE THE DRUMS ARE NOT VULNERABLE TO DAMAGE FROM VEHICLES, FORKLIFTS, OR OTHER MOVING EQUIPMENT. (PCBA** 79/EPA) STORE AT AMBIENT TEMPERATURES WITH OPEN

VENTING. (CGHCD* 78/USCG) UPDATED 12/84.

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(HND) General Handling Procedures: WEAR GLOVES AND APRONS MADE OF NEOPRENE, VITRON, OR POLYETHYLENE AND IMPERVIOUS SHOES. HANDLE ONLY WITH AN ADEQUATE VENTILATION SYSTEM. (CFCTS* 80-83/BUR) CANCER SUSPECT AGENT. DO NOT GET IN EYES OR ON SKIN OR CLOTHING. WEAR PROTECTIVE CLOTHING IMPERVIOUS TO PCBS: GLOVES, BOOTS, OVERSHOES, AND BIB-TYPE APRONS THAT COVER BOOT TOPS. FOR EYE PROTECTION, WEAR CHEMICAL SAFETY GOGGLES, FACE SHIELDS AT LEAST 8 INCHES LONG WITH GOGGLES, OR SAFETY GLASSES WITH SIDE SHIELDS. FOR ROUTINE OPERATIONS, ENGINEERING CONTROLS MUST BE USED TO KEEP THE AIRBORNE PCB CONCENTRATION BELOW THE RECOMMENDED TWA. DO NOT WEAR WORK CLOTHING AWAY FROM PLACE OF EMPLOYMENT. WEAR CLEAN WORK CLOTHING DAILY. INFORM CLEANING ESTABLISHMENTS OF HAZARDS AND PROPER WASTEWATER DISPOSAL PROCEDURES. WASH HANDS AND EXPOSED SKIN BEFORE EATING, DRINKING, SMOKING, OR USING TOILET FACILITIES. FOOD, DRINK, OR SMOKING MATERIALS ARE NOT PERMITTED IN AREAS WHERE PCBS ARE HANDLED, PROCESSED, OR STORED. (CRSOE* 77-225,77/NIOSH) FOR RESPIRATOR SELECTION FOR EMERGENCIES OR FOR NONROUTINE MAINTENANCE OR REPAIR ACTIVITIES AND FOR INSTALLATION AND TESTING OF REQUIRED ENGINEERING CONTROLS, SEE FIELD SAF. UPDATED 11/84.

Binary Reactants: PCBS ARE GENERALLY INERT WHEN PLACED IN CONTACT WITH (BIN) OTHER MATERIALS UNDER NORMAL CONDITIONS OF TEMPERATURE AND PRESSURE. HOWEVER, STRONG SUNLIGHT CONDITIONS MAY CAUSE THE FORMATION OF PHENOLIC MATERIALS AND TRACES OF POLYCHLORINATED DIBENZOFURANS. (EVHPAZ 1,15,72/HUT) (BECTA6 10(6)372,73/CRO)

Detection Limit (Lab.; Techniques, Ref) (ppm): IN AIR, POLYCHLORINATED (LDL) BIPHENYLS (PCBS) ARE ABSORBED BY FLORISIL IN A TUBE. THEY ARE DESORBED WITH HEXANE AND ANALYZED BY GAS CHROMATOGRAPHY WITH ELECTRON CAPTURE DETECTION. DETECTION LIMIT: 0.01 MG/M3. INTERFERENCES: CONTAMINANTS. NIOSH METHOD 253 (NIOSH* II,1,77/TAY). IN WASTEWATERS AT PH 5 TO 9, MINATED BIPHENYLS (PCBS) ARE EXTRACTED WITH DICHLORAMETHANE,

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